

## CLAIMS

1. A method of operating a wind power installation wherein a first light intensity is detected in a region of direct light irradiation and a second light intensity is detected in a shadowed region, and wherein the wind power installation is shut down if the difference between the first light intensity and the second light intensity is greater than a predetermined value.

2. A method according to claim 1 which shuts down the wind power installation only at a predetermined position of the sun.

3. A method according to claim 2 characterised in that the wind power installation is at least temporarily shut down at a predetermined position of the sun.

4. A method according to claim 2 or claim 3 characterised in that the predetermined positions of the sun at which shutdown of the installation can be triggered are stored in the wind power installation or a control and/or data processing apparatus associated with the wind power installation.

5. A method according to one of the preceding claims characterised in that the difference between light and shadow is determined by means of a plurality of light sensors and an evaluation can be effected from the ascertained difference by means of a data processing program.

6. A wind power installation for carrying out the method according to one of the preceding claims comprising a data processing apparatus which controls the wind power installation and in which are stored the positions of the sun or values representative in that respect, in respect of which shutdown of the installation can take place.

7. A wind power installation according to claim 6 characterised in that the wind power installation is coupled to a plurality of light sensors, by means of which the respectively current intensity of light and shadow or the intensity of light and shadow ascertained over a certain time is measured, and that the data determined by the light sensors are processed by the data processing apparatus and shutdown of the wind power installation is effected if the difference between light and shadow is above a predetermined value when a predetermined position of the sun is assumed.

8. A wind power installation according to claim 7 characterised in that at least three uniformly spaced sensors are arranged around the wind power installation.

9. A wind power installation according to one of claims 6 to 8 characterised in that the installation has a display device, by means of which the status of shadow-based shutdown can be reproduced.

10. A wind power installation according to one of claims 6 to 9 characterised in that, beyond the stored positions of the sun, fresh positions of the sun for further immission points can be stored, which is effected by means of suitable programming.

11. A wind farm having a plurality of wind power installations according to one of the preceding claims.